



NORDREGIO
Nordic Centre for Spatial Development

European Research Challenges for ESPON 2020



Photo: Kjell Nilsson

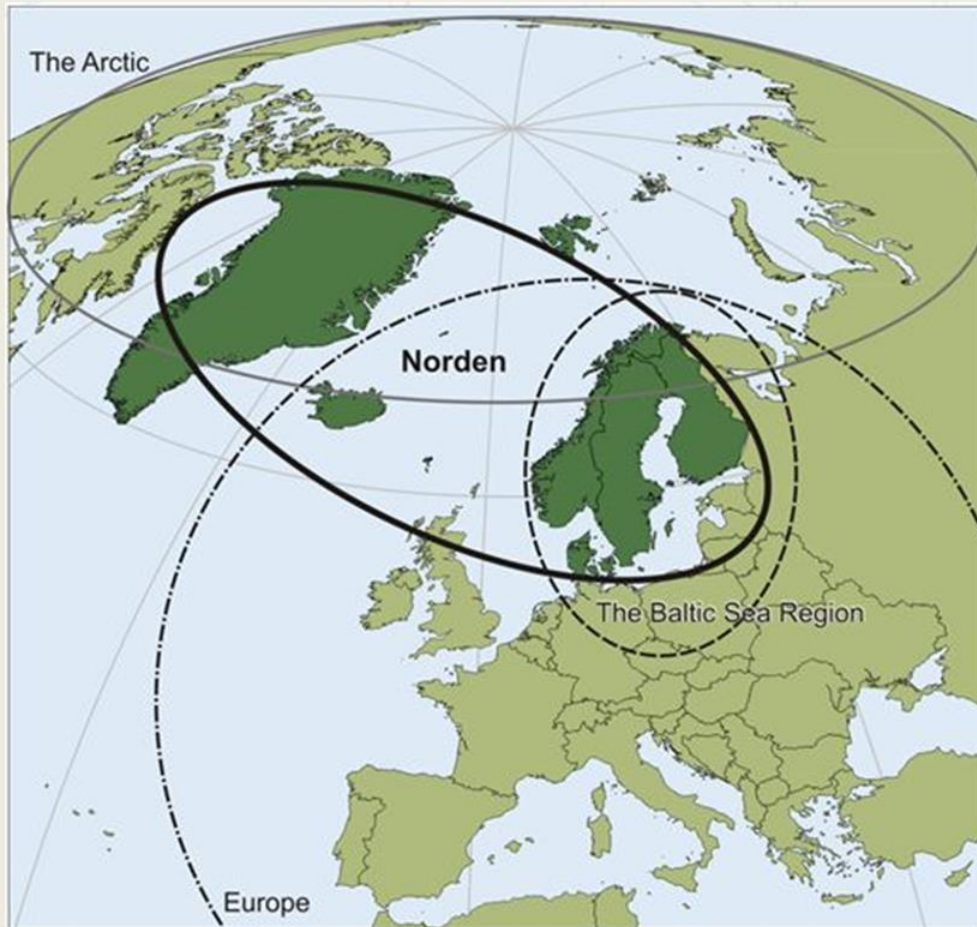
Rasmus Ole Rasmussen, Senior Research Fellow
Nordregio



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Nordic Council of Ministers

Perspectives of Nordregio



POLICY background

Nordic Council of Ministers

ESPON experiences

Applied Research (14)

Targeted Analysis (3)

Scientific Platform (3)

Geographic scope

- Nordic countries
- Europe
- The Baltic Sea Region
- The Arctic

The two sided aspects of research challenges

Topical

Methodological

The two sided aspects of research challenges

Topical

- Bio- and Circular Economy



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- Bio- and Circular Economy
- Renewable energy



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- Bio- and Circular Economy
- Renewable energy
- Tripple Bottom Line



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- **Sparsely populated areas**



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- Sparsely populated areas
- **Multi-Functionalities**



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- **Urban/Rural Interaction**



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- Multi-Functionalities
- Urban/Rural Interaction
- **Demographic challenges**



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- Urban/Rural Interaction
- Demographic challenges

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- Demographic challenges

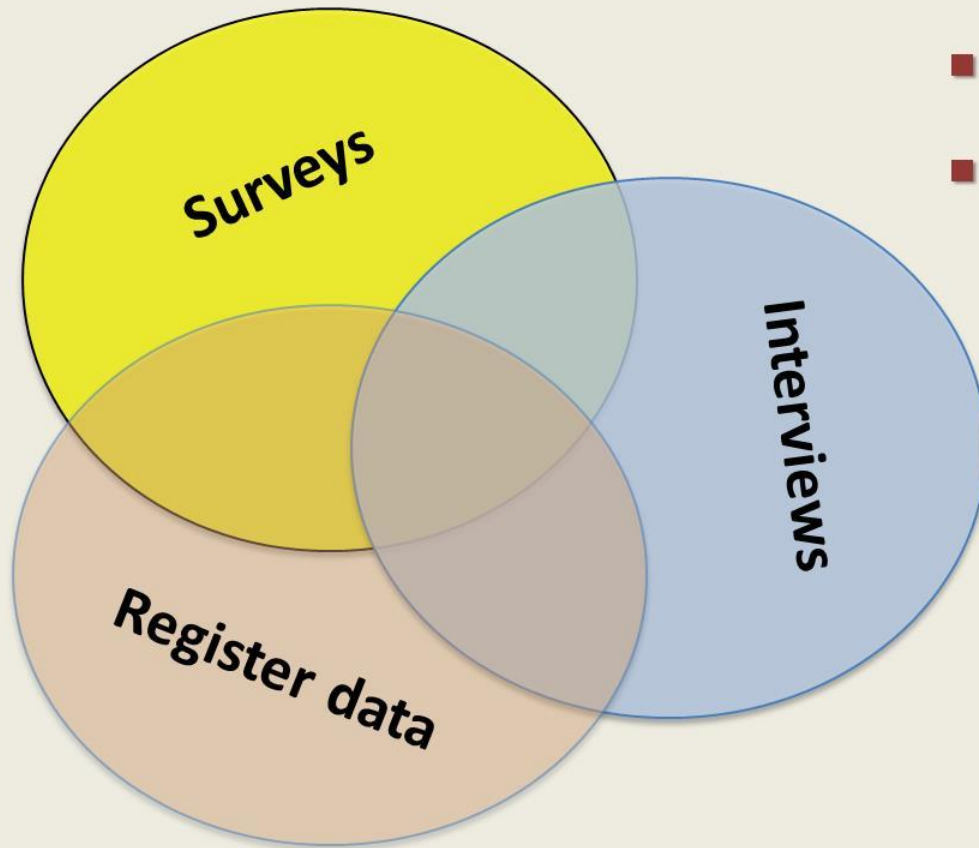
Methodological

- Triangulation
- Combined Indicators
- Modelling
- Community based Micro-simulations
- Foresight approaches
- New Social Media

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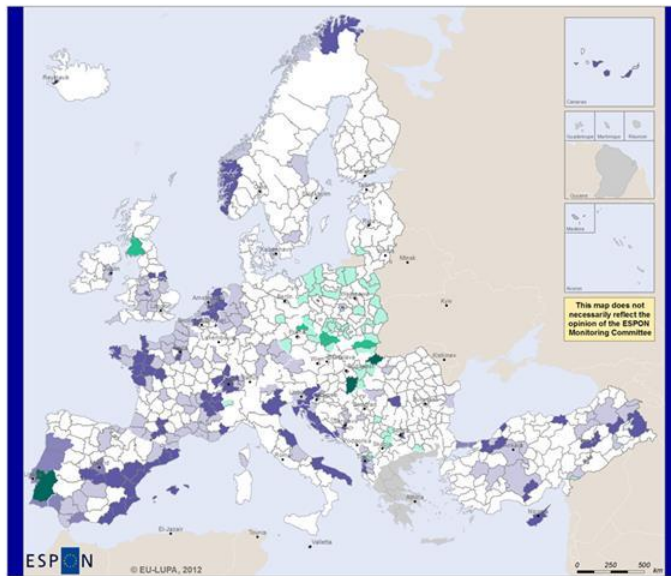
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2000 - 2006 Land Change Hotspots



ESPON
EUROPEAN UNION
Part-financed by the European Regional Development Fund
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Regional level: NUTS 20
Source: Nordregio, 2012
Origin of data: EEA, 2011
© EuroGeographics Association for administrative boundaries

Matrix of land change hotspots

The x-axis shows the amount of land that has undergone change between the given years (in percent) while the y-axis indicates the change in intensity as a result of those changes. Therefore, regions in white represent those with relatively stable land cover characteristics while increasingly darker shades of green or purple identify "hotspots" of change where high intensifications or extensifications are coupled with increasing levels of overall land change are evident.

Intensity of change	Above 1.50					
	1.00 to 1.49					
	0.50 to 0.99					
	0 to 0.49					
	Below 0					
		Below 2.5%	2.5-5%	5-10%	10-20%	Above 20%
		Amount of change				

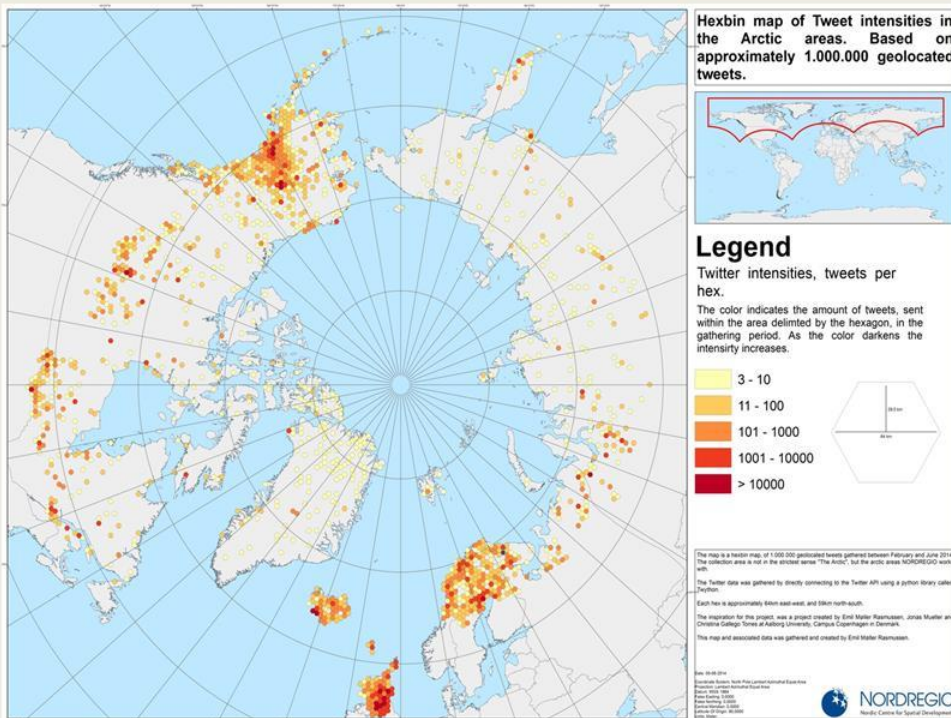
□ No Data

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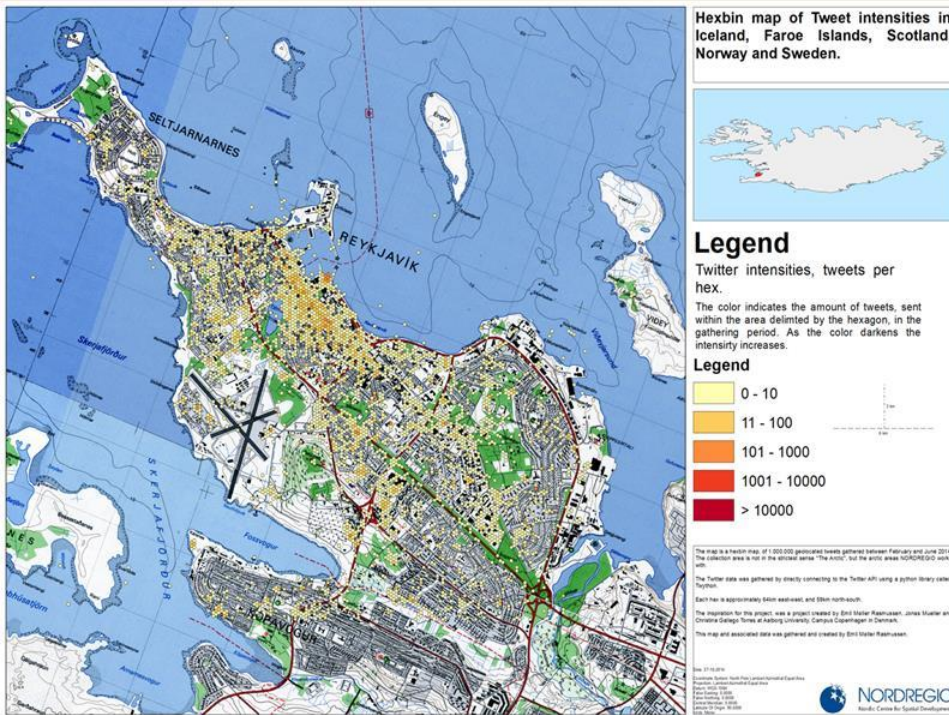
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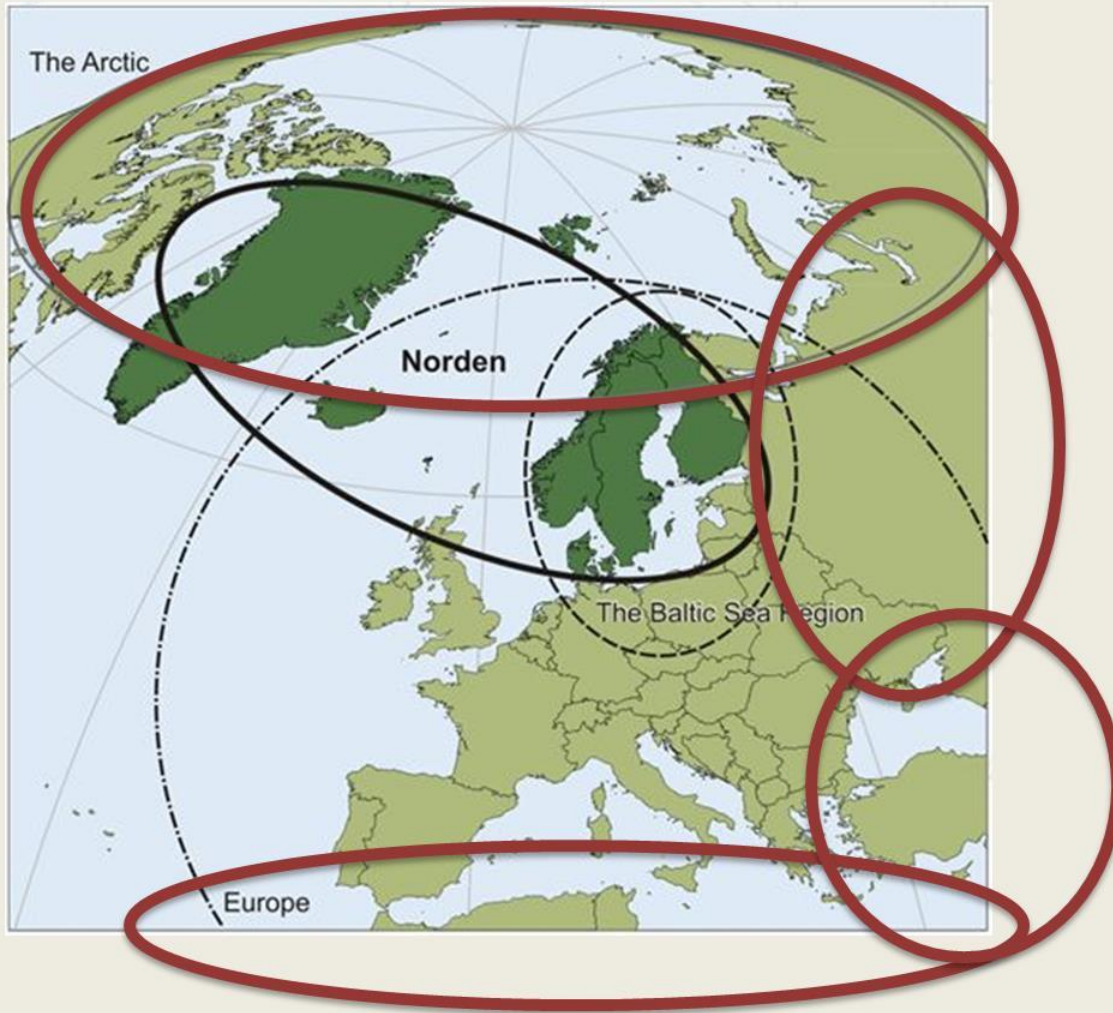
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Beyond the European Perspectives



Beyond the Borders of Europe

- Africa
- The Middle East
- Russia
- The Arctic



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Thank you for your attention

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